

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Attorney Docket No. 016887/0999



In re patent application of
Nagayoshi ICHIKAWA et al.

Group Art Unit: 3641

Serial No. 09/599,027

Examiner: R. Palabrica

Filed: June 22, 2000

For: REACTOR STRUCTURAL MEMBER AND METHOD OF SUPPRESSING
CORROSION OF THE SAME

REPLY TO RESTRICTION REQUIREMENT

Commissioner for Patents
Washington, D.C. 20231

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DEC 28 2001
GROUP 3600

Sir:

In reply to the Office Action dated October 2, 2001, the applicants have elected Group II (Invention II), claims 10 - 25, while preserving the right to file a divisional application for the non-elected claims (Group I (Invention I), Claims 1-9; and Group III (Invention III), claim 26).

ELECTIONS

In reply to Item 2 of the Official Action, the applicants have elected Species A - wherein the corrosion potential reducing material is a photocatalytic substance that produces an electromotive force under an irradiation of light or radioactive ray (see e.g., claim 10).

In reply to Item 3 of the Official Action, the applicants have elected TiO₂.

In reply to Item 5 of the Official Action, the applicants have elected Species C - wherein the corrosion reducing substance is in the form of a solution or suspension and added to reactor water in order to adhere or form a film on the structure surface (see claim 15).

In reply to Item 6 of the Official Action, the applicants have elected nickel for the base material of the structural member.

In reply to Item 7 of the Official Action, the applicants have elected Species G - wherein the corrosion oxide film consists of a double layer, i.e., inner and outer (see claim 20).

In reply to Item 8 of the Official Action, the applicants have elected chemical species of decontamination for removal of the outer layer.

In reply to Item 9 of the Official Action, the applicants have elected Species J - wherein the control of the reactor water is by hydrogen injection.

In reply to Item 10 of the Official Action, the applicants have elected Pt for the surface material of the structural member.

In reply to Item 11 of the Official Action, it is believed that Claims 10 to 15 and 17 to 25 read on the elected species A, C, G and J.

REMARKS

The applicants respectfully suggest that a single search and examination on the merits can be conducted of the elected species while considering both nickel-based alloy and iron-based alloy base materials without undue additional effort. This belief is based on the fact that nuclear reactor components are generally made of either iron-based or nickel-based alloy base materials, and reactors often include iron-based components and nickel-based components within a single system. Therefore, references relevant to limiting corrosion of reactor vessels and components should be found in common classifications. The applicants believe that it is inappropriate to require the election of either nickel or iron as set forth in the Item 6 of the Official Action because this election may unnecessarily limit the scope of examination. Therefore, the Examiner is respectfully requested to conduct an examination on the merit of the elected species considering both iron-based and nickel-based alloy base materials.